

upperside of the wings, but the yellow of the underside is deep orange-yellow and the fringes of the secondaries on the underside are white throughout.

Expanse 96 millim.

Type in the Royal Natural History Museum in Berlin.

These two species of *Xanthospilopteryx* are the largest of the genus thus far discovered in Africa, and belong to the same group with the splendid insect named *X. Hornimanni*, Druce.

Hotel Victoria, London,  
July 14, 1897.

XXVIII.—*On a Collection of Fishes from the Island of Marajo, Brazil.* By G. A. BOULENGER, F.R.S.

A LARGE and important collection of Fishes formed on the island of Marajo has been sent to me for identification by Dr. E. A. Goeldi, the Director of the Pará Museum, with permission to retain types and duplicates for the British Museum. It seems to me desirable to publish a list of all the Fishes identified, together with the descriptions of two which require the establishment of new species. One of the most valuable examples in the collection is the *Lepidosiren* previously recorded by Dr. Goeldi, and which, I am glad to add, I have been allowed to incorporate in the British Museum collection.

TELEOSTEI.

Serranidæ.

1. *Epinephelus itaiara*, Licht. M.\*
2. *Centropomus undecimalis*, Lacép. M.

Pristipomatidæ.

3. *Diagramma Goeldii*, sp. n. M.

Depth of body  $2\frac{1}{2}$  times in total length, length of head  $3\frac{1}{3}$ . Snout as long as diameter of eye, which is 4 times in length of head; interorbital region nearly flat, its width nearly  $\frac{1}{3}$  length of head; maxillary extending to below anterior

\* These initials refer to the localities, and read thus:—

M. Magoarisinho, Cape Magoary.

P. Pocoval, Cape Magoary.

S. Soure.

border of eye; præopercular border distinctly serrated; snout naked, rest of head scaly. Gill-rakers moderate, the longest measuring about  $\frac{1}{3}$  diameter of eye, 12 on lower part of anterior arch. Dorsal XIII 12, originating above posterior border of opercle, the spinous portion  $2\frac{1}{2}$  times as long as the soft and twice as deep; spines strong, increasing in length to the fifth, which measures a little over half length of head, and decreasing again to the last two, which measure  $\frac{1}{4}$  length of head. Pectoral  $\frac{3}{4}$  length of head, as long as ventral. Anal III 11; second spine very strong, longest,  $\frac{2}{3}$  length of head. Caudal with crescentic emargination. Scales finely ciliated,  $65\frac{7}{20}$ ; lat. l. 57. Uniform silvery.

Total length 260 millim.

#### Sciænidæ.

4. *Sciæna amazonica*, Cast. M., S.
5. *Plagioscion squamosissimus*, Heck. M.
6. *Plagioscion auratus*, Cast. M.
7. *Otolithus liarchus*, C. & V. M.

#### Carangidæ.

8. *Argyriosus vomer*, L. S.

#### Batrachidæ.

9. *Batrachus surinamensis*, Bl. Schn. M.

#### Mugilidæ.

10. *Mugil incilis*, Hancock. M.

#### Cichlidæ.

11. *Acara tetramerus*, Heck.
12. *Heros coryphænoides*, Heck.
13. *Hygrogonus ocellatus*, Ag. S.
14. *Cichla temensis*, Humb.
15. *Crenicichla johanna*, Heck.
16. *Crenicichla saxatilis*, L. S.
17. *Chætobranchus robustus*, Gthr. S.
18. *Satanoperca jurupari*, Heck.

#### Pleuronectidæ.

19. *Solea maculipinnis*, Ag. M.

## Siluridæ.

20. *Pimelodus maculatus*, Lacép.
21. *Pimelodus ornatus*, Kner.
22. *Pimelodus Muelleri*, Gthr. P.
23. *Pimelodus altipinnis*, Sldr. M.
24. *Platystoma Vaillanti*, C. & V. M.
25. *Piratinga Rousseauxii*, Cast. P.
26. *Arius Herzbergii*, Bl. M., P., S.
27. *Arius proops*, C. & V. M.
28. *Arius luniscutis*, C. & V. M.
29. *Arius rugispinis*, C. & V. M., P., S.
30. *Arius nuchalis*, Gthr. M.
31. *Arius pleurops*, sp. n. M.

Palatine teeth villiform, in two widely separated transverse patches which are narrower than the præmaxillary band. Depth of body  $4\frac{2}{3}$  times in total length, length of head  $3\frac{1}{4}$ . Width of head  $\frac{2}{3}$  its length; upper surface granular posteriorly; fontanelle extending from the internarial region to the base of the occipital process, which is keeled, nearly as long as broad, and in contact with a very small crescentic bone at the base of the dorsal; naked parts of head with reticulating or arborescent canals; eye perfectly lateral, just behind and on a level with the angle of the mouth, its diameter 5 times in length of head,  $1\frac{1}{2}$  in length of snout,  $2\frac{1}{2}$  in interorbital width; barbels short, not reaching gill-cleft. Dorsal I 6; spine nearly  $\frac{3}{4}$  length of head, granular in front, with antrorse serration behind. Adipose fin small, its base  $\frac{1}{2}$  that of dorsal. Pectoral spine slightly shorter than dorsal, likewise granular in front and serrated behind. Anal 20, its longest rays  $\frac{2}{5}$  length of head. Caudal deeply forked. Brown above, silvery beneath.

Total length 170 millim.

The single specimen sheltered in its mouth eighteen eggs, 8 millim. in diameter, with embryos in an advanced state of development.

32. *Ælurichthys Gronovii*, C. & V. M.
33. *Auchenipterus striatulus*, Sldr.
34. *Auchenipterus nodosus*, Bl. M.

Differs from the typical form in having the dorsal and

pectoral spines shorter than the head, the body less elongate, the length of the head barely four times in the total, and the supraoccipital bone broader than long. Dr. and Mrs. Eigenmann have already drawn attention to the great variation in the length of the spines in this species, and observed them to be shorter in specimens from Pará.

35. *Cetopsis cæcutiens*, Licht.

36. *Doras costatus*, L. S.

The single specimen, 220 millim. long, has a very puzzling appearance, owing to the absence of the caudal peduncle. The posterior end of the tail must have been accidentally amputated, and the shape of the well-developed caudal fin points to neogenesis. The posterior scutes being missing, with the caudal peduncle, the lateral line numbers only 23.

37. *Doras Weddelli*, Cast.

38. *Doras dorsalis*, C. & V.

39. *Callichthys littoralis*, Hancock. P.

40. *Plecostomus bicirrhosus*, Gron. M., P.

41. *Liposarcus pardalis*, Cast. S.

42. *Chætostomus spinosus*, Cast.

43. *Chætostomus cirrhosus*, Val.

44. *Aspredo cotylophorus*, Bl. M., P.

#### Characinidæ.

45. *Macrodon trahira*, Bl. Schn. P.

46. *Macrodon intermedius*, Gthr. P.

47. *Erythrinus uniteniatus*, Spix. P., S.

48. *Hemiodus microcephalus*, Gthr.

49. *Anostomus fasciatus*, Ag. S.

50. *Leporinus affinis*, Gthr.

51. *Tetragonopterus maculatus*, L.

52. *Brycon brevicauda*, Gthr.

53. *Piabuca argentina*, L.

54. *Anacyrtus Myersii*, Gill.

55. *Serrasalmo serrulatus*, C. & V. S.

56. *Serrasalmo piraya*, Cuv. P.

57. *Myletes rubripinnis*, M. & T.

58. *Myletes maculatus*, Kner. S.

Scombresocidæ.

59. *Belone tæniata*, Gthr. S.

Cyprinodontidæ.

60. *Anableps microlepis*, M. & T. P.

Clupeidæ.

61. *Pellona flavipinnis*, Val. M.

62. *Megalops thrissoides*, Bl. Schn. M.

Gymnotidæ.

63. *Carapus fasciatus*, Pall. S.

Tetrodontidæ.

64. *Tetrodon psittacus*, Bl. Schn. M.

DIPNOI.

65. *Lepidosiren paradoxa*, Fitz. M.

The discovery of this fish at Cape Magoary has been reported upon by Dr. Goeldi (Bol. Mus. Para. i. 1896, p. 438), who has also given a map showing the distribution of the species.

CHONDROPTERYGII.

66. *Carcharias porosus*, Poey. M.

67. *Trygon tuberculata*, Lacép. M.

68. *Trygon hystrix*, M. & H.

The description is appended of a new Chromid obtained by Dr. Goeldi in the Upper Cunani River, French Guiana, south of the Oyapok River.

*Heros Goeldii*, sp. n.

Depth of body 2 in total length, length of head 3 times. Upper profile of head regularly curved; eye nearer gill-opening than end of snout, its diameter  $3\frac{1}{2}$  to  $3\frac{2}{3}$  times in length of head and  $\frac{2}{3}$  interorbital width; cleft of mouth not

extending to below anterior border of eye; scales on cheek in 4 series. Dorsal XVI 12, originating above opercular cleft; spines gradually increasing in length to the last, which measures  $\frac{1}{3}$  length of head; soft dorsal pointed, middle rays longest, produced, nearly as long as head. Pectoral a little shorter than head. Ventral with produced inner ray, reaching middle of anal. Anal VI 9; spines and soft rays as in the dorsal. Caudal rounded. Scales  $31 \frac{4}{11}$ ; lat. l.  $19 \frac{19}{11}$ . Reddish brown, with a large black blotch on each side between the two lateral lines, below the middle of the dorsal fin.

Total length 160 millim.

Two specimens.

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XXIX.—*Descriptions of some new Species of Heterocera from Tropical America.* By HERBERT DRUCE, F.L.S. &c.

Fam. Agaristidæ.

*Orthia volupia*, sp. n.

*Male*.—Primaries black, crossed beyond the middle by a narrow cream-coloured band, which does not reach either margin: secondaries chrome-yellow, bordered with black, widest near the anal angle, the inner margin clothed with black hairs. Underside very similar to the upperside, but the band crossing the primaries wider and with a yellow streak extending from the base to the end of the cell. The head, antennæ, legs, and thorax black; the abdomen yellow, with a central black line extending from the base to the anus; the anus and anal segments on the underside black.

Expanse  $2\frac{1}{4}$  inches.

*Hab.* Ecuador, St. Lusia (*Mus. Druce*).

This species is allied to *O. præfectus*, Druce, which has the primaries entirely black.

*Orthia elaphebolia*, sp. n.

*Male*.—Primaries deep black, crossed beyond the middle by a narrow chrome-yellow band that does not reach either margin, the fringe black: secondaries deep black, with a large central lobe-shaped yellow spot extending from the base. The head, antennæ, thorax, upper and underside of the abdomen, and the legs black; the collar and sides of the abdomen chrome-yellow, the anus black.

Expanse  $2\frac{1}{2}$  inches.

*Hab.* Ecuador, Intaj (*Buckley, Mus. Druce*).